

Application No. 10/019,275  
Amendment dated October 14, 2003  
Reply Office Action of June 13, 2003

### **REMARKS**

Claims 1-19 are pending in this application, of which claims 1 has been amended. No new claims have been added.

#### **Claim Rejections – 35 U.S.C. 112**

Claims 1-19 were rejected under 35U.S.C. 112, second paragraph. Claim 1 is amended to introduce a new recitation of “wherein said free exciton recombination radiation being dominant refers to a state where the intensity of the free exciton recombination radiation is at least two times or more greater than the intensity of radiation caused by impurities or defects.” The basis of the amendment is found at page 7, line 25 to page 8, line 7. The amendment in claim 1 is believed to overcome the rejections.

#### **Claim Rejections – 35 U.S.C. 102 and 103**

Claims 1-2, 4-5, 7-15, 16-19 were rejected under 35USC102 as unpatentable by Yoshiki (Japanese Document 4-240784).

Claims 1-2, 4-15, 16-19 were rejected under 35USC103 as unpatentable by Yoshiki (Japanese Document 4-240784).

As stated in the specification (page 7, lines 8-17), Yoshiki (Japanese Document 4-240784) discloses a diamond light-emitting device having a peak at a wavelength of 400nm and emits light having a wide wavelength range from 300nm to 500nm (Fig. 4 of Yoshiki). The wavelength of the radiation disclosed by Yoshiki is longer than that of the free exciton recombination radiation, and therefore, it is not desirable for micro fabrication. In addition, although Yoshiki discloses a radiation peak at a wavelength of around 260nm (Fig. 2 of Yoshiki), the radiation disclosed by Yoshiki is caused by impurities or lattice defects.

The disclosure of Yoshiki that the efficiency of light emission is higher at a higher temperature (Paragraph [0021] of Yoshiki), shows that Yoshiki does not disclose or teach the free exciton recombination radiation. In the case of the free exciton recombination radiation, its efficiency is reduced at a higher temperature. Therefore, the recitation of "wherein the free exciton recombination radiation is dominant" patentably distinguishes the present invention from Yoshiki. Reconsideration of the rejections is respectfully requested.

Partial translation of Yoshiki is attached for the examiner's review.

In view of the aforementioned amendments and accompanying remarks, claims 1-19, as herein amended, are in condition for allowance. Applicants request such action at an early date.

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If the Examiner believes that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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